RESULT 2
AAF21042
ID AAF21042 standard; DNA; 1376 BP.
XX
AC AAF21042;
XX
DT 14-MAR-2001 (first entry)
XX
DE Human low adenosine antisense oligonucleotide related sequence #2609.
XX
KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
KW human; airway disorder; bronchoconstriction; lung inflammation;
KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
KW respiratory obstruction; pulmonary obstruction; impeded respiration;
KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KW cancer; ss.
XX
OS Homo sapiens.
XX
PN WO200062736-A2.
XX
PD 26-OCT-2000.
XX
PF 24-MAR-2000; 2000WO-US08020.
XX
PR 06-APR-1999; 99US-0127958.
XX
PA (UYEC-) UNIV EAST CAROLINA.
PA (NYCE/) NYCE J W.
XX
PI Nyce JW;
XX
DR WPI; 2000-679539/66.
XX
PT Low adenosine (A) content antisense oligonucleotides which do not
PT trigger adenosine receptors during metabolism, useful e.g. for treating
PT cancers and respiratory obstructions -
XX
PS Disclosure; Page 850; 1592pp; English.
XX
CC The present invention describes low adenosine (A) content antisense
CC oligonucleotides and compositions (I) comprising them. In the antisense
CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
CC The antisense oligonucleotides and (I) can be used to down-regulate the
CC expression and or activity of target polypeptides associated with
CC lung/respiratory disorders and malignancies, such as stimulating and
CC activating peptide factors and transmitters, transcription factors,
CC immunoglobulins and antibodies, antibody receptors, cytokines and
CC chemokines, endogenously produced specific and non-specific enzymes,
CC binding proteins, adhesion molecules and their receptors, cytokine and
CC chemokine receptors, adenosine receptors, bradykinin receptors, central

CC nervous system (CNS) and peripheral nervous and non-nervous system
CC receptors, CNS and peripheral nervous and non-nervous system peptide
CC transmitters, defensins, growth factors, vasoactive peptides and
CC receptors, binding proteins and malignancy associated proteins. The
CC antisense oligonucleotides may be used in this way to treat disorders
CC including respiratory obstruction (especially pulmonary obstruction
CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies)
CC and/or surfactant hypoproduction which are associated with a disease or
CC condition selected from pulmonary vasoconstriction, inflammation,
CC allergies, asthma, impeded respiration, respiratory distress syndrome
CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC fragments and antisense oligonucleotides used in the exemplification of
CC the present invention.
XX
SQ Sequence 1376 BP; 138 A; 526 C; 484 G; 228 T; 0 other;

Query Match 24.7%; Score 967; DB 21; Length 1376;
Best Local Similarity 97.0%; Pred. No. 1.8e-155;
Matches 985; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

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Qy   2051 ccagcacccctggcgcctgacatgagcccttgcgggcccctcaacctgagcctggcgggc 2110
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Db     54 ccggcacccctggcgcctgacatgagcccttgcgggcccctcaacctgagcctggcgggc 113

Qy   2111 gaggcgaccacatgcgcggcgccctgggtccccaacacgtcggccgtgccgccgtcgggc 2170
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    114 gaggcgaccacatgcgcggcgccctgggtccccaacacgtcggccgtgccgccgtcgggc 173

Qy   2171 gcttcgcccgcgctgcccatcttctccatgacgctgggcgccgtgtccaacctgctggcg 2230
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Db    174 gcttcgcccgcgctgcccatcttctccatgacgctgggcgccgtgtccaacctgctggcg 233

Qy   2231 ctggcgctgctggcgcaggccgcgggccgcctgcgacgccgccgctcggccgccaccttc 2290
          |||||||||||||||||||||||||||||||||||||||||||||||||||| ||||||||
Db    234 ctggcgctgctggcgcaggccgcgggccgcctgcgacgccgccgctcggccaccaccttc 293

Qy   2291 ctgctgttcgtggccagcctgctggccaccgacctggcgggccacgtgatcccgggcgcg 2350
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Db    294 ctgctgttcgtggccagcctgctggccaccgacctggcgggccacgtgatcccgggcgcg 353

Qy   2351 ctggtgctgcgtctgtacactgcggggcgcgctccggccggcggggcctgccacttcctg 2410
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Db    354 ctggtgctgcgtctgtacactgcggggcgcgctccggccggcggggcctgccacttcctg 413

Qy   2411 ggcggctgcatggtcttcttcggcctgtgcccgctgctgctgggctgtggcatggccgtg 2470
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    414 ggcggctgcatggtcttcttcggcctgtgcccgctgctgctgggctgtggcatggccgtg 473

Qy   2471 gagcgctgcgtgggcgtcacgcggccgctgctccacgccgcgcgggtctcggtcgcccgc 2530
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    474 gagcgctgcgtgggcgtcacgcggccgctgctccacgccgcgcgggtctcggtcgcccgc 533

Qy   2531 gcgcgcctggcgctggccgcggtggccgcggtggccttggccgtggcgctgctgccgctg 2590
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Db    534 gcgcgcctggcgctggccgcggtggccgcggtggccttggccgtggcgctgctgccgctg 593

Qy   2591 gcgcgcgtgggccgctatgagctgcagtacccgggcacgtggtgcttcatcggcctgggt 2650
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    594 gcgcgcgtgggccgctatgagctgcagtacccgggcacgtggtgcttcatcggcctgggt 653

Qy   2651 cccccgggcggctggcgccaggcactgcttgctggcctcttcgccagcctcggcctggtc 2710
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Db    654 cccccgggcggctggcgccaggcactgcttgctggcctcttcgccagcctcggcctggtc 713

Qy   2711 gcgctcctcgccgcgctggtgtgcaacacgctcagcggcctggccctgctacgcgcccgc 2770
          |||||||||||||||||||||||||||||||||||||||||||||||||  |||||||||
Db    714 gcgctcctcgccgcgctggtgtgcaacacgctcagcggcctggccctgcatcgcgcccgc 773

Qy   2771 tggcgacgccgctcccgacggcctcccccggcctcaggccccgacagccggcgtcgctgg 2830
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    774 tggcgacgccgctcccgacggcctcccccggcctcaggccccgacagccggcgtcgctgg 833

Qy   2831 ggggcgcacggaccccgctcggcctccgcctcgtccgcctcgtccatcgcttcggcctcc 2890
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    834 ggggcgcacggaccccgctcggcctccgcctcgtccgcctcgtccatcgcttcggcctcc 893

Qy   2891 accttctttggcggctctcggagcagcggctcggcacgcagagctcgcgcccacgacgtg 2950
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    894 accttctttggcggctctcggagcagcggctcggcacgcagagctcgcgcccacgacgtg 953

Qy   2951 gagatggtgggccagcttgtcggtatcatggtggtgtcgtgcatctgctggagcccaatg 3010
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    954 gagatggtgggccagcttgtcggtatcatggtggtgtcgtgcatctgctggagcccaatg 1013

Qy   3011 ctggtgaggggcgcaccggcccctcgagccacgctccttcccgctccctctcggc 3065
          ||||||  ||  || | ||||    | | |  |  |  | || | |     ||||
Db   1014 ctggtgttggtggcgctggccgtcggcggctggagctctacctccctgcagcggc 1068
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RESULT 3
AAA34920
ID AAA34920 standard; DNA; 1376 BP.
XX
AC AAA34920;
XX
DT 28-JUL-2000 (first entry)
XX
DE Human adenosine receptor related polynucleotide SEQ ID NO:2609.
XX
KW Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW phosphorothioate; impaired respiration; inflammation; allergy;
KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX
OS Homo sapiens.
XX

PN WO200009525-A2.
XX
PD 24-FEB-2000.
XX
PF 03-AUG-1999; 99WO-US17712.
XX
PR 03-AUG-1998; 98US-0095212.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW;
XX
DR WPI; 2000-205971/18.
XX
PT New antisense oligonucleotides useful for treating e.g. pulmonary
PT vasoconstriction, inflammation, allergies, asthma, hypertension,
PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
PT cancers -
XX
PS Disclosure; Page 779; 1343pp; English.
XX
CC The present invention describes a new composition comprising an
CC antisense oligonucleotide (ON) with low adenosine (up to 15%), which
CC targets nucleic acids involved in bronchoconstriction, allergies, and/or
CC inflammation. The ON can have antiinflammatory, antiallergic,
CC antiasthmatic, cytostatic and analgesic activities. The compositions are
CC useful for the treatment of diseases associated with inflammation,
CC impaired airways, including lung disease and diseases whose secondary
CC effects afflict the lungs of a subject. They can be used for treating
CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies,
CC asthma, impeded respiration, respiratory distress syndrome, pain, cystic
CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
CC carcinomas, and cancers which may metastasise to the lungs, including
CC breast and prostate cancer. The reduction of the adenosine content of
CC the ONs reduces side effects. The A-containing ONs break down with the
CC release of deoxyadenosine which activates adenosine receptors causing
CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
CC nucleotide sequences given in the sequence listing from the present
CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last
CC 185 sequences are also called SEQ ID NO:1 to 185, but the sequences
CC differ from the previously named sequences. SEQ ID NO:11 to 1680
CC (AAA32323 to AAA33992) are specifically claimed ONs from the present
CC invention. N.B. Sequences given in the disclosure of the present
CC invention do not match up with their corresponding SEQ ID NO: sequences
CC given in the sequence listing.
XX
SQ Sequence 1376 BP; 138 A; 526 C; 484 G; 228 T; 0 other;

Query Match 24.7%; Score 967; DB 21; Length 1376;
Best Local Similarity 97.0%; Pred. No. 1.8e-155;
Matches 985; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

Qy 2051 ccagcacccctggcgcctgacatgagcccttgcgggcccctcaacctgagcctggcgggc 2110
|| ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 54 ccggcacccctggcgcctgacatgagcccttgcgggcccctcaacctgagcctggcgggc 113

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Qy   2111 gaggcgaccacatgcgcggcgccctgggtccccaacacgtcggccgtgccgccgtcgggc 2170
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Db    114 gaggcgaccacatgcgcggcgccctgggtccccaacacgtcggccgtgccgccgtcgggc 173

Qy   2171 gcttcgcccgcgctgcccatcttctccatgacgctgggcgccgtgtccaacctgctggcg 2230
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Db    174 gcttcgcccgcgctgcccatcttctccatgacgctgggcgccgtgtccaacctgctggcg 233

Qy   2231 ctggcgctgctggcgcaggccgcgggccgcctgcgacgccgccgctcggccgccaccttc 2290
          |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    234 ctggcgctgctggcgcaggccgcgggccgcctgcgacgccgccgctcggccaccaccttc 293

Qy   2291 ctgctgttcgtggccagcctgctggccaccgacctggcgggccacgtgatcccgggcgcg 2350
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    294 ctgctgttcgtggccagcctgctggccaccgacctggcgggccacgtgatcccgggcgcg 353

Qy   2351 ctggtgctgcgtctgtacactgcggggcgcgctccggccggcggggcctgccacttcctg 2410
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    354 ctggtgctgcgtctgtacactgcggggcgcgctccggccggcggggcctgccacttcctg 413

Qy   2411 ggcggctgcatggtcttcttcggcctgtgcccgctgctgctgggctgtggcatggccgtg 2470
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    414 ggcggctgcatggtcttcttcggcctgtgcccgctgctgctgggctgtggcatggccgtg 473

Qy   2471 gagcgctgcgtgggcgtcacgcggccgctgctccacgccgcgcgggtctcggtcgcccgc 2530
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    474 gagcgctgcgtgggcgtcacgcggccgctgctccacgccgcgcgggtctcggtcgcccgc 533

Qy   2531 gcgcgcctggcgctggccgcggtggccgcggtggccttggccgtggcgctgctgccgctg 2590
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Db    534 gcgcgcctggcgctggccgcggtggccgcggtggccttggccgtggcgctgctgccgctg 593

Qy   2591 gcgcgcgtgggccgctatgagctgcagtacccgggcacgtggtgcttcatcggcctgggt 2650
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    594 gcgcgcgtgggccgctatgagctgcagtacccgggcacgtggtgcttcatcggcctgggt 653

Qy   2651 cccccgggcggctggcgccaggcactgcttgctggcctcttcgccagcctcggcctggtc 2710
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Db    654 cccccgggcggctggcgccaggcactgcttgctggcctcttcgccagcctcggcctggtc 713

Qy   2711 gcgctcctcgccgcgctggtgtgcaacacgctcagcggcctggccctgctacgcgcccgc 2770
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Db    714 gcgctcctcgccgcgctggtgtgcaacacgctcagcggcctggccctgcatcgcgcccgc 773

Qy   2771 tggcgacgccgctcccgacggcctcccccggcctcaggccccgacagccggcgtcgctgg 2830
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    774 tggcgacgccgctcccgacggcctcccccggcctcaggccccgacagccggcgtcgctgg 833

Qy   2831 ggggcgcacggaccccgctcggcctccgcctcgtccgcctcgtccatcgcttcggcctcc 2890
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    834 ggggcgcacggaccccgctcggcctccgcctcgtccgcctcgtccatcgcttcggcctcc 893

Qy   2891 accttctttggcggctctcggagcagcggctcggcacgcagagctcgcgcccacgacgtg 2950
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    894 accttctttggcggctctcggagcagcggctcggcacgcagagctcgcgcccacgacgtg 953
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Qy   2951 gagatggtgggccagcttgtcggtatcatggtggtgtcgtgcatctgctggagcccaatg 3010
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Db    954 gagatggtgggccagcttgtcggtatcatggtggtgtcgtgcatctgctggagcccaatg 1013

Qy   3011 ctggtgaggggcgcaccggcccctcgagccacgctccttcccgctccctctcggc 3065
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Db   1014 ctggtgttggtggcgctggccgtcggcggctggagctctacctccctgcagcggc 1068


RESULT   4
AAQ80287
ID   AAQ80287 standard; cDNA; 1394 BP.
XX
AC   AAQ80287;
XX
DT   07-JUL-1995  (first entry)
XX
DE   Prostaglandin receptor EP1 cDNA.
XX
KW   Prostaglandin receptor; EP1; modulator; therapeutic; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             75..1281
FT                   /*tag=  a
FT                   /note= "EP1"
FT   polyA_site      1357..1382
XX
PN   WO9428125-A.
XX
PD   08-DEC-1994.
XX
PF   25-MAY-1994;   94WO-CA00296.
XX
PR   26-MAY-1993;   93US-0068729.
XX
PA   (MERI ) MERCK FROSST CANADA INC.
PA   (UYVA-) UNIV VANDERBILT.
XX
PI   Ford-Hutchinson A,  Funk C,  Grygorczyk R,  Metters K;
XX
DR   WPI; 1995-022797/03.
DR   P-PSDB; AAR64200.
XX
PT   Prostaglandin EPI receptor protein, and DNA encoding it - used to
PT   identify modulators of the prostaglandin receptor.
XX
PS   Claim 4; Fig 1; 50pp; English.
XX
CC   DNA encoding prostaglandin receptor EP1 may be cloned in a
CC   vector for expression in mammalian cells.  Recombinant EP1
CC   can be used to identify modulators of EP1 activity, which are
CC   useful for the treatment of prostaglandin-related diseases and for
CC   modulating the effects of prostaglandin on the EP1 receptor.
XX
SQ   Sequence 1394 BP; 158 A; 525 C; 483 G; 228 T; 0 other;
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Query Match 24.7%; Score 967; DB 16; Length 1394;
Best Local Similarity 97.0%; Pred. No. 1.8e-155;
Matches 985; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

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Qy   2051 ccagcacccctggcgcctgacatgagcccttgcgggcccctcaacctgagcctggcgggc 2110
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Qy   2111 gaggcgaccacatgcgcggcgccctgggtccccaacacgtcggccgtgccgccgtcgggc 2170
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Qy   2171 gcttcgcccgcgctgcccatcttctccatgacgctgggcgccgtgtccaacctgctggcg 2230
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Db    174 gcttcgcccgcgctgcccatcttctccatgacgctgggcgccgtgtccaacctgctggcg 233

Qy   2231 ctggcgctgctggcgcaggccgcgggccgcctgcgacgccgccgctcggccgccaccttc 2290
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Db    234 ctggcgctgctggcgcaggccgcgggccgcctgcgacgccgccgctcggccaccaccttc 293

Qy   2291 ctgctgttcgtggccagcctgctggccaccgacctggcgggccacgtgatcccgggcgcg 2350
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Qy   2351 ctggtgctgcgtctgtacactgcggggcgcgctccggccggcggggcctgccacttcctg 2410
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Qy   2411 ggcggctgcatggtcttcttcggcctgtgcccgctgctgctgggctgtggcatggccgtg 2470
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy   2471 gagcgctgcgtgggcgtcacgcggccgctgctccacgccgcgcgggtctcggtcgcccgc 2530
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    474 gagcgctgcgtgggcgtcacgcggccgctgctccacgccgcgcgggtctcggtcgcccgc 533

Qy   2531 gcgcgcctggcgctggccgcggtggccgcggtggccttggccgtggcgctgctgccgctg 2590
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    534 gcgcgcctggcgctggccgcggtggccgcggtggccttggccgtggcgctgctgccgctg 593

Qy   2591 gcgcgcgtgggccgctatgagctgcagtacccgggcacgtggtgcttcatcggcctgggt 2650
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    594 gcgcgcgtgggccgctatgagctgcagtacccgggcacgtggtgcttcatcggcctgggt 653

Qy   2651 cccccgggcggctggcgccaggcactgcttgctggcctcttcgccagcctcggcctggtc 2710
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    654 cccccgggcggctggcgccaggcactgcttgctggcctcttcgccagcctcggcctggtc 713

Qy   2711 gcgctcctcgccgcgctggtgtgcaacacgctcagcggcctggccctgctacgcgcccgc 2770
          ||||||||||||||||||||||||||||||||||||||||||||||||||  |||||||||
Db    714 gcgctcctcgccgcgctggtgtgcaacacgctcagcggcctggccctgcatcgcgcccgc 773

Qy   2771 tggcgacgccgctcccgacggcctcccccggcctcaggccccgacagccggcgtcgctgg 2830
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    774 tggcgacgccgctcccgacggcctcccccggcctcaggccccgacagccggcgtcgctgg 833
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Qy   2831 ggggcgcacggaccccgctcggcctccgcctcgtccgcctcgtccatcgcttcggcctcc 2890
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    834 ggggcgcacggaccccgctcggcctccgcctcgtccgcctcgtccatcgcttcggcctcc 893

Qy   2891 accttctttggcggctctcggagcagcggctcggcacgcagagctcgcgcccacgacgtg 2950
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    894 accttctttggcggctctcggagcagcggctcggcacgcagagctcgcgcccacgacgtg 953

Qy   2951 gagatggtgggccagcttgtcggtatcatggtggtgtcgtgcatctgctggagcccaatg 3010
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    954 gagatggtgggccagcttgtcggtatcatggtggtgtcgtgcatctgctggagcccaatg 1013

Qy   3011 ctggtgaggggcgcaccggcccctcgagccacgctccttcccgctccctctcggc 3065
          ||||||  ||  || | ||||    | | |  |  |  | || | |     ||||
Db   1014 ctggtgttggtggcgctggccgtcggcggctggagctctacctccctgcagcggc 1068
```

```
RESULT   5
AAF21047
ID   AAF21047 standard; DNA; 9060 BP.
XX
AC   AAF21047;
XX
DT   14-MAR-2001  (first entry)
XX
DE   Human low adenosine antisense oligonucleotide related sequence #2614.
XX
KW   Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
KW   human; airway disorder; bronchoconstriction; lung inflammation;
KW   surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KW   immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
KW   respiratory obstruction; pulmonary obstruction; impeded respiration;
KW   surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KW   respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
KW   pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW   chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KW   cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200062736-A2.
XX
PD   26-OCT-2000.
XX
PF   24-MAR-2000; 2000WO-US08020.
XX
PR   06-APR-1999;   99US-0127958.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
PA   (NYCE/) NYCE J W.
XX
PI   Nyce JW;
XX
DR   WPI; 2000-679539/66.
XX
PT   Low adenosine (A) content antisense oligonucleotides which do not
```

PT trigger adenosine receptors during metabolism, useful e.g. for treating
PT cancers and respiratory obstructions -
XX
PS Disclosure; Page 852-854; 1592pp; English.
XX
CC The present invention describes low adenosine (A) content antisense
CC oligonucleotides and compositions (I) comprising them. In the antisense
CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
CC The antisense oligonucleotides and (I) can be used to down-regulate the
CC expression and or activity of target polypeptides associated with
CC lung/respiratory disorders and malignancies, such as stimulating and
CC activating peptide factors and transmitters, transcription factors,
CC immunoglobulins and antibodies, antibody receptors, cytokines and
CC chemokines, endogenously produced specific and non-specific enzymes,
CC binding proteins, adhesion molecules and their receptors, cytokine and
CC chemokine receptors, adenosine receptors, bradykinin receptors, central
CC nervous system (CNS) and peripheral nervous and non-nervous system
CC receptors, CNS and peripheral nervous and non-nervous system peptide
CC transmitters, defensins, growth factors, vasoactive peptides and
CC receptors, binding proteins and malignancy associated proteins. The
CC antisense oligonucleotides may be used in this way to treat disorders
CC including respiratory obstruction (especially pulmonary obstruction
CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies)
CC and/or surfactant hypoproduction which are associated with a disease or
CC condition selected from pulmonary vasoconstriction, inflammation,
CC allergies, asthma, impeded respiration, respiratory distress syndrome
CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC fragments and antisense oligonucleotides used in the exemplification of
CC the present invention.
XX
SQ Sequence 9060 BP; 1812 A; 2734 C; 2459 G; 2055 T; 0 other;

Query Match 24.7%; Score 967; DB 21; Length 9060;
Best Local Similarity 97.0%; Pred. No. 1.9e-155;
Matches 985; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

```
Qy   2051 ccagcacccctggcgcctgacatgagcccttgcgggcccctcaacctgagcctggcgggc 2110
          || ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   2426 ccggcacccctggcgcctgacatgagcccttgcgggcccctcaacctgagcctggcgggc 2485

Qy   2111 gaggcgaccacatgcgcggcgccctgggtccccaacacgtcggccgtgccgccgtcgggc 2170
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   2486 gaggcgaccacatgcgcggcgccctgggtccccaacacgtcggccgtgccgccgtcgggc 2545

Qy   2171 gcttcgcccgcgctgcccatcttctccatgacgctgggcgccgtgtccaacctgctggcg 2230
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   2546 gcttcgcccgcgctgcccatcttctccatgacgctgggcgccgtgtccaacctgctggcg 2605

Qy   2231 ctggcgctgctggcgcaggccgcgggccgcctgcgacgccgccgctcggccgccaccttc 2290
          |||||||||||||||||||||||||||||||||||||||||||||||||||| ||||||||
Db   2606 ctggcgctgctggcgcaggccgcgggccgcctgcgacgccgccgctcggccaccaccttc 2665
```

```
Qy   2291 ctgctgttcgtggccagcctgctggccaccgacctggcgggccacgtgatcccgggcgcg 2350
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   2666 ctgctgttcgtggccagcctgctggccaccgacctggcgggccacgtgatcccgggcgcg 2725

Qy   2351 ctggtgctgcgtctgtacactgcggggcgcgctccggccggcggggcctgccacttcctg 2410
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   2726 ctggtgctgcgtctgtacactgcggggcgcgctccggccggcggggcctgccacttcctg 2785

Qy   2411 ggcggctgcatggtcttcttcggcctgtgcccgctgctgctgggctgtggcatggccgtg 2470
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   2786 ggcggctgcatggtcttcttcggcctgtgcccgctgctgctgggctgtggcatggccgtg 2845

Qy   2471 gagcgctgcgtgggcgtcacgcggccgctgctccacgccgcgcgggtctcggtcgcccgc 2530
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   2846 gagcgctgcgtgggcgtcacgcggccgctgctccacgccgcgcgggtctcggtcgcccgc 2905

Qy   2531 gcgcgcctggcgctggccgcggtggccgcggtggccttggccgtggcgctgctgccgctg 2590
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   2906 gcgcgcctggcgctggccgcggtggccgcggtggccttggccgtggcgctgctgccgctg 2965

Qy   2591 gcgcgcgtgggccgctatgagctgcagtacccgggcacgtggtgcttcatcggcctgggt 2650
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   2966 gcgcgcgtgggccgctatgagctgcagtacccgggcacgtggtgcttcatcggcctgggt 3025

Qy   2651 cccccgggcggctggcgccaggcactgcttgctggcctcttcgccagcctcggcctggtc 2710
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   3026 cccccgggcggctggcgccaggcactgcttgctggcctcttcgccagcctcggcctggtc 3085

Qy   2711 gcgctcctcgccgcgctggtgtgcaacacgctcagcggcctggccctgctacgcgcccgc 2770
          ||||||||||||||||||||||||||||||||||||||||||||||||||  |||||||||
Db   3086 gcgctcctcgccgcgctggtgtgcaacacgctcagcggcctggccctgcatcgcgcccgc 3145

Qy   2771 tggcgacgccgctcccgacggcctcccccggcctcaggccccgacagccggcgtcgctgg 2830
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   3146 tggcgacgccgctcccgacggcctcccccggcctcaggccccgacagccggcgtcgctgg 3205

Qy   2831 ggggcgcacggaccccgctcggcctccgcctcgtccgcctcgtccatcgcttcggcctcc 2890
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   3206 ggggcgcacggaccccgctcggcctccgcctcgtccgcctcgtccatcgcttcggcctcc 3265

Qy   2891 accttctttggcggctctcggagcagcggctcggcacgcagagctcgcgcccacgacgtg 2950
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   3266 accttctttggcggctctcggagcagcggctcggcacgcagagctcgcgcccacgacgtg 3325

Qy   2951 gagatggtgggccagcttgtcggtatcatggtggtgtcgtgcatctgctggagcccaatg 3010
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   3326 gagatggtgggccagcttgtcggtatcatggtggtgtcgtgcatctgctggagcccaatg 3385

Qy   3011 ctggtgaggggcgcaccggcccctcgagccacgctccttcccgctccctctcggc 3065
          ||||||  ||  || | ||||    | | |  |  |  | || | |     ||||
Db   3386 ctggtgttggtggcgctggccgtcggcggctggagctctacctccctgcagcggc 3440
```

RESULT 6
AAA34925
ID AAA34925 standard; DNA; 9060 BP.

XX
AC AAA34925;
XX
DT 28-JUL-2000 (first entry)
XX
DE Human adenosine receptor related polynucleotide SEQ ID NO:2614.
XX
KW Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW phosphorothioate; impaired respiration; inflammation; allergy;
KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX
OS Homo sapiens.
XX
PN WO200009525-A2.
XX
PD 24-FEB-2000.
XX
PF 03-AUG-1999; 99WO-US17712.
XX
PR 03-AUG-1998; 98US-0095212.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW;
XX
DR WPI; 2000-205971/18.
XX
PT New antisense oligonucleotides useful for treating e.g. pulmonary
PT vasoconstriction, inflammation, allergies, asthma, hypertension,
PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
PT cancers -
XX
PS Disclosure; Page 781-783; 1343pp; English.
XX
CC The present invention describes a new composition comprising an
CC antisense oligonucleotide (ON) with low adenosine (up to 15%), which
CC targets nucleic acids involved in bronchoconstriction, allergies, and/or
CC inflammation. The ON can have antiinflammatory, antiallergic,
CC antiasthmatic, cytostatic and analgesic activities. The compositions are
CC useful for the treatment of diseases associated with inflammation,
CC impaired airways, including lung disease and diseases whose secondary
CC effects afflict the lungs of a subject. They can be used for treating
CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies,
CC asthma, impeded respiration, respiratory distress syndrome, pain, cystic
CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
CC carcinomas, and cancers which may metastasise to the lungs, including
CC breast and prostate cancer. The reduction of the adenosine content of
CC the ONs reduces side effects. The A-containing ONs break down with the
CC release of deoxyadenosine which activates adenosine receptors causing
CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
CC nucleotide sequences given in the sequence listing from the present

CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last
CC 185 sequences are also called SEQ ID NO:1 to 185, but the sequences
CC differ from the previously named sequences. SEQ ID NO:11 to 1680
CC (AAA32323 to AAA33992) are specifically claimed ONs from the present
CC invention. N.B. Sequences given in the disclosure of the present
CC invention do not match up with their corresponding SEQ ID NO: sequences
CC given in the sequence listing.
XX
SQ Sequence 9060 BP; 1812 A; 2735 C; 2459 G; 2054 T; 0 other;

Query Match 24.7%; Score 967; DB 21; Length 9060;
Best Local Similarity 97.0%; Pred. No. 1.9e-155;
Matches 985; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

```
Qy   2051 ccagcacccctggcgcctgacatgagcccttgcgggcccctcaacctgagcctggcgggc 2110
          || ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   2426 ccggcacccctggcgcctgacatgagcccttgcgggcccctcaacctgagcctggcgggc 2485

Qy   2111 gaggcgaccacatgcgcggcgccctgggtccccaacacgtcggccgtgccgccgtcgggc 2170
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   2486 gaggcgaccacatgcgcggcgccctgggtccccaacacgtcggccgtgccgccgtcgggc 2545

Qy   2171 gcttcgcccgcgctgcccatcttctccatgacgctgggcgccgtgtccaacctgctggcg 2230
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   2546 gcttcgcccgcgctgcccatcttctccatgacgctgggcgccgtgtccaacctgctggcg 2605

Qy   2231 ctggcgctgctggcgcaggccgcgggccgcctgcgacgccgccgctcggccgccaccttc 2290
          |||||||||||||||||||||||||||||||||||||||||||||||||||| ||||||||
Db   2606 ctggcgctgctggcgcaggccgcgggccgcctgcgacgccgccgctcggccaccaccttc 2665

Qy   2291 ctgctgttcgtggccagcctgctggccaccgacctggcgggccacgtgatcccgggcgcg 2350
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   2666 ctgctgttcgtggccagcctgctggccaccgacctggcgggccacgtgatcccgggcgcg 2725

Qy   2351 ctggtgctgcgtctgtacactgcggggcgcgctccggccggcggggcctgccacttcctg 2410
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   2726 ctggtgctgcgtctgtacactgcggggcgcgctccggccggcggggcctgccacttcctg 2785

Qy   2411 ggcggctgcatggtcttcttcggcctgtgcccgctgctgctgggctgtggcatggccgtg 2470
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   2786 ggcggctgcatggtcttcttcggcctgtgcccgctgctgctgggctgtggcatggccgtg 2845

Qy   2471 gagcgctgcgtgggcgtcacgcggccgctgctccacgccgcgcgggtctcggtcgcccgc 2530
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   2846 gagcgctgcgtgggcgtcacgcggccgctgctccacgccgcgcgggtctcggtcgcccgc 2905

Qy   2531 gcgcgcctggcgctggccgcggtggccgcggtggccttggccgtggcgctgctgccgctg 2590
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   2906 gcgcgcctggcgctggccgcggtggccgcggtggccttggccgtggcgctgctgccgctg 2965

Qy   2591 gcgcgcgtgggccgctatgagctgcagtacccgggcacgtggtgcttcatcggcctgggt 2650
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   2966 gcgcgcgtgggccgctatgagctgcagtacccgggcacgtggtgcttcatcggcctgggt 3025

Qy   2651 cccccgggcggctggcgccaggcactgcttgctggcctcttcgccagcctcggcctggtc 2710
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Db    3026 cccccgggcggctggcgccaggcactgcttgctggcctcttcgccagcctcggcctggtc 3085

Qy    2711 gcgctcctcgccgcgctggtgtgcaacacgctcagcggcctggccctgctacgcgcccgc 2770
           ||||||||||||||||||||||||||||||||||||||||||||||||||  |||||||||
Db    3086 gcgctcctcgccgcgctggtgtgcaacacgctcagcggcctggccctgcatcgcgcccgc 3145

Qy    2771 tggcgacgccgctcccgacggcctcccccggcctcaggccccgacagccggcgtcgctgg 2830
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    3146 tggcgacgccgctcccgacggcctcccccggcctcaggccccgacagccggcgtcgctgg 3205

Qy    2831 ggggcgcacggaccccgctcggcctccgcctcgtccgcctcgtccatcgcttcggcctcc 2890
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    3206 ggggcgcacggaccccgctcggcctccgcctcgtccgcctcgtccatcgcttcggcctcc 3265

Qy    2891 accttctttggcggctctcggagcagcggctcggcacgcagagctcgcgcccacgacgtg 2950
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    3266 accttctttggcggctctcggagcagcggctcggcacgcagagctcgcgcccacgacgtg 3325

Qy    2951 gagatggtgggccagcttgtcggtatcatggtggtgtcgtgcatctgctggagcccaatg 3010
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    3326 gagatggtgggccagcttgtcggtatcatggtggtgtcgtgcatctgctggagcccaatg 3385

Qy    3011 ctggtgaggggcgcaccggcccctcgagccacgctccttcccgctccctctcggc 3065
           ||||||  ||  || | ||||    | | |  |  |  | || | |     ||||
Db    3386 ctggtgttggtggcgctggccgtcggcggctggagctctacctccctgcagcggc 3440
```

RESULT 7
AAZ93894
ID AAZ93894 standard; DNA; 1226 BP.
XX
AC AAZ93894;
XX
DT 25-SEP-2000 (first entry)
XX
DE Human EP-1 prostaglandin receptor coding sequence.
XX
KW Prostaglandin; receptor; pulmonary system; glaucoma;
KW identification; allele; polymorphism; detection; prostanoid; FP;
KW IP; DP; EP; TP; human; ds.
XX
OS Homo sapiens.
XX

FH	Key	Location/Qualifiers
FT	CDS	1..1209
FT		/*tag= a
FT		/product= EP-1 prostaglandin receptor
FT	allele	replace (264,Y)
FT		/*tag= b
FT	allele	replace (767,R)
FT		/*tag= c
FT	allele	replace (816,Y)
FT		/*tag= d
FT	allele	replace (999,R)
FT		/*tag= e

XX
PN WO200029614-A1.

XX
PD 25-MAY-2000.
XX
PF 12-NOV-1998; 98WO-IB01803.
XX
PR 12-NOV-1998; 98WO-IB01803.
XX
PA (EURO-) EURONA MEDICAL AB.
XX
PI Jonsson L, Lindstroem HR;
XX
DR WPI; 2000-387820/33.
DR P-PSDB; AAY83411.
XX
PT Assessing prostanoid response status in an individual suffering from
PT prostaglandin associated diseases such as pulmonary hypertension,
PT glaucoma or arteriosclerosis, comprises comparing polymorphic patterns
XX
PS Claim 20; Fig 2; 57pp; English.
XX
CC The prostaglandin receptor family encompasses at least five classes
CC of receptors designated FP, EP, IP, DP and TP receptors which are
CC classified based on their sensitivity to the five primary prostanoids
CC (F2alpha, E_2, I_2, D_2 and TXA_2). EP receptors further comprise
CC four subtypes, designated EP1-4, which differ in their responses to
CC various agonists and antagonists. The receptors have also shown a
CC degree of cross reactivity. They may derive from a common ancestral
CC gene. All of the receptors may exist as allelic variants and these
CC polymorphisms may have an affect on a patients reaction to
CC prostanoids. Detection of these polymorphisms may identify patients
CC at risk from toxic or abnormal responses to prostanoid treatment.
CC The prostaglandins play a role in the pulmonary system and in
CC glaucoma.
XX
SQ Sequence 1226 BP; 111 A; 475 C; 430 G; 210 T; 0 other;

Query Match 24.2%; Score 949.2; DB 21; Length 1226;
Best Local Similarity 97.2%; Pred. No. 1.9e-152;
Matches 966; Conservative 0; Mismatches 28; Indels 0; Gaps 0;

```
Qy   2072 atgagcccttgcgggcccctcaacctgagcctggcgggcgaggcgaccacatgcgcggcg 2131
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1 atgagcccttgcgggcccctcaacctgagcctggcgggcgaggcgaccacatgcgcggcg 60

Qy   2132 ccctgggtccccaacacgtcggccgtgccgccgtcgggcgcttcgcccgcgctgcccatc 2191
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     61 ccctgggtccccaacacgtcggccgtgccgccgtcgggcgcttcgcccgcgctgcccatc 120

Qy   2192 ttctccatgacgctgggcgccgtgtccaacctgctggcgctggcgctgctggcgcaggcc 2251
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    121 ttctccatgacgctgggcgccgtgtccaacctgctggcgctggcgctgctggcgcaggcc 180

Qy   2252 gcgggccgcctgcgacgccgccgctcggccgccaccttcctgctgttcgtggccagcctg 2311
          |||||||||||||||||||||||||||||| ||||||||||||||||||||||||||||||
Db    181 gcgggccgcctgcgacgccgccgctcggccaccaccttcctgctgttcgtggccagcctg 240
```

```
Qy   2312 ctggccaccgacctggcgggccacgtgatcccgggcgcgctggtgctgcgtctgtacact 2371
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    241 ctggccaccgacctggcgggccacgtgatcccgggcgcgctggtgctgcgtctgtacact 300

Qy   2372 gcggggcgcgctccggccggcggggcctgccacttcctgggcggctgcatggtcttcttc 2431
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    301 gcggggcgcgctccggccggcggggcctgccacttcctgggcggctgcatggtcttcttc 360

Qy   2432 ggcctgtgcccgctgctgctgggctgtggcatggccgtggagcgctgcgtgggcgtcacg 2491
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    361 ggcctgtgcccgctgctgctgggctgtggcatggccgtggagcgctgcgtgggcgtcacg 420

Qy   2492 cggccgctgctccacgccgcgcgggtctcggtcgcccgcgcgcgcctggcgctggccgcg 2551
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    421 cggccgctgctccacgccgcgcgggtctcggtcgcccgcgcgcgcctggcgctggccgcg 480

Qy   2552 gtggccgcggtggccttggccgtggcgctgctgccgctggcgcgcgtgggccgctatgag 2611
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    481 gtggccgcggtggccttggccgtggcgctgctgccgctggcgcgcgtgggccgctatgag 540

Qy   2612 ctgcagtacccgggcacgtggtgcttcatcggcctgggtcccccgggcggctggcgccag 2671
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    541 ctgcagtacccgggcacgtggtgcttcatcggcctgggtcccccgggcggctggcgccag 600

Qy   2672 gcactgcttgctggcctcttcgccagcctcggcctggtcgcgctcctcgccgcgctggtg 2731
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    601 gcactgcttgctggcctcttcgccagcctcggcctggtcgcgctcctcgccgcgctggtg 660

Qy   2732 tgcaacacgctcagcggcctggccctgctacgcgcccgctggcgacgccgctcccgacgg 2791
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    661 tgcaacacgctcagcggcctggccctgctacgcgcccgctggcgacgccgctcccgacgg 720

Qy   2792 cctcccccggcctcaggccccgacagccggcgtcgctgggggggcgcacggaccccgctcg 2851
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Db    721 cctcccccggcctcaggccccgacagccggcgtcgctgggggggcgcacggaccccgctcg 780

Qy   2852 gcctccgcctcgtccgcctcgtccatcgcttcggcctccaccttctttggcggctctcgg 2911
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Qy   2912 agcagcggctcggcacgcagagctcgcgcccacgacgtggagatggtgggccagcttgtc 2971
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Qy   2972 ggtatcatggtggtgtcgtgcatctgctggagcccaatgctggtgaggggcgcaccggcc 3031
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Db    901 ggtatcatggtggtgtcgtgcatctgctggagcccaatgctggtgttggtggcgctggcc 960

Qy   3032 cctcgagccacgctccttcccgctccctctcggc 3065
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Db    961 gtcggcggctggagctctacctccctgcagcggc 994


RESULT   8
ABI98018
ID   ABI98018 standard; cDNA; 1209 BP.
XX
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AC ABI98018;
XX
DT 18-FEB-2002 (first entry)
XX
DE Non-endogenous human GPCR cDNA, SEQ ID NO: 556.
XX
KW Human; G protein-coupled receptor; GPCR; non-endogenous; mutant;
KW constitutively activated GPCR; agonist; disease; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200177172-A2.
XX
PD 18-OCT-2001.
XX
PF 05-APR-2001; 2001WO-US11098.
XX
PR 07-APR-2000; 2000US-195747P.
XX
PA (AREN-) ARENA PHARM INC.
XX
PI Lehmann-Bruinsma K, Liaw CW, Lin I;
XX
DR WPI; 2001-648759/74.
DR P-PSDB; ABB56382.
XX
PT Identifying agonists of G protein-coupled receptors (GPCRs) for use in
PT disease treatment, comprises contacting candidate compounds with
PT versions of GPCRs -
XX
PS Example 2; Page 358; 394pp; English.
XX
CC The invention relates to G protein-coupled receptors (GPCRs) for which
CC the endogenous ligand has been identified. Non-endogenous
CC constitutively activated versions of known GPCRs are used in the
CC invention for the direct identification of candidate compounds as
CC receptor agonists, inverse agonists or partial agonists. Such
CC agonists are useful as therapeutic agents for diseases or disorders
CC associated with GPCRs. The present sequence encodes a non-endogenous
CC version of a known human GPCR.
XX
SQ Sequence 1209 BP; 107 A; 469 C; 424 G; 209 T; 0 other;

Query Match 24.1%; Score 944.4; DB 23; Length 1209;
Best Local Similarity 96.9%; Pred. No. 1.2e-151;
Matches 963; Conservative 0; Mismatches 31; Indels 0; Gaps 0;

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Qy 2132 ccctgggtccccaacacgtcggccgtgccgccgtcgggcgcttcgcccgcgctgcccatc 2191
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Qy   2312 ctggccaccgacctggcgggccacgtgatcccgggcgcgctggtgctgcgtctgtacact 2371
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Db    241 ctggccaccgacctggcgggccacgtgatcccgggcgcgctggtgctgcgtctgtacact 300

Qy   2372 gcggggcgcgctccggccggcggggcctgccacttcctgggcggctgcatggtcttcttc 2431
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Qy   2432 ggcctgtgcccgctgctgctgggctgtggcatggccgtggagcgctgcgtgggcgtcacg 2491
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Db    361 ggcctgtgcccgctgctgctgggctgtggcatggccgtggagcgctgcgtgggcgtcacg 420

Qy   2492 cggccgctgctccacgccgcgcgggtctcggtcgcccgcgcgcgcctggcgctggccgcg 2551
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Qy   2552 gtggccgcggtggccttggccgtggcgctgctgccgctggcgcgcgtgggccgctatgag 2611
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Db    481 gtggccgcggtggccttggccgtggcgctgctgccgctggcgcgcgtgggccgctatgag 540

Qy   2612 ctgcagtacccgggcacgtggtgcttcatcggcctgggtcccccgggcggctggcgccag 2671
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Db    541 ctgcagtacccgggcacgtggtgcttcatcggcctgggtcccccgggcggctggcgccag 600

Qy   2672 gcactgcttgctggcctcttcgccagcctcggcctggtcgcgctcctcgccgcgctggtg 2731
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Db    601 gcactgcttgctggcctcttcgccagcctcggcctggtcgcgctcctcgccgcgctggtg 660

Qy   2732 tgcaacacgctcagcggcctggccctgctacgcgcccgctggcgacgccgctcccgacgg 2791
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Db    661 tgcaacacgctcagcggcctggccctgcatcgcgcccgctggcgacgccgctcccgacgg 720

Qy   2792 cctcccccggcctcaggccccgacagccggcgtcgctgggggggcgcacggaccccgctcg 2851
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Db    721 cctcccccggcctcaggccccgacagccggcgtcgctgggggggcgcacggaccccgctcg 780

Qy   2852 gcctccgcctcgtccgcctcgtccatcgcttcggcctccaccttctttggcggctctcgg 2911
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Qy   2972 ggtatcatggtggtgtcgtgcatctgctggagcccaatgctggtgaggggcgcaccggcc 3031
          |||||||||||||||||||||||||||||||||||||||||||||  ||  ||  | ||||
Db    901 ggtatcatggtggtgtcgtgcatctgctggagcccaatgctggtgttggtggcgctggcc 960

Qy   3032 cctcgagccacgctccttcccgctccctctcggc 3065
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Db    961 gtcggcggctggagctctacctccctgcagcggc 994
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US Pats

RESULT 1
US-08-068-729-3
; Sequence 3, Application US/08068729
; Patent No. 5985597
; GENERAL INFORMATION:
; APPLICANT: Ford-Hutchinson, Anthony
; APPLICANT: Funk, Colin
; APPLICANT: Grygorczyk, Richard
; APPLICANT: Metters, Kathleen
; TITLE OF INVENTION: DNA Encoding Prostaglandin Receptor EP1
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: JOHN W. WALLEN III
; STREET: P.O. BOX 2000, 126 E. LINCOLN AVE.
; CITY: RAHWAY
; STATE: NEW JERSEY
; COUNTRY: USA
; ZIP: 07065
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/068,729
; FILING DATE: 26-MAY-1993
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: WALLEN, JOHN W III
; REGISTRATION NUMBER: 35,403
; REFERENCE/DOCKET NUMBER: 19012
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (908) 594-3905
; TELEFAX: (908) 594-4720
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1394 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
US-08-068-729-3

Query Match 24.7%; Score 967; DB 2; Length 1394;
Best Local Similarity 97.0%; Pred. No. 4.3e-171;
Matches 985; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

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Qy   2111 gaggcgaccacatgcgcggcgccctgggtccccaacacgtcggccgtgccgccgtcgggc 2170
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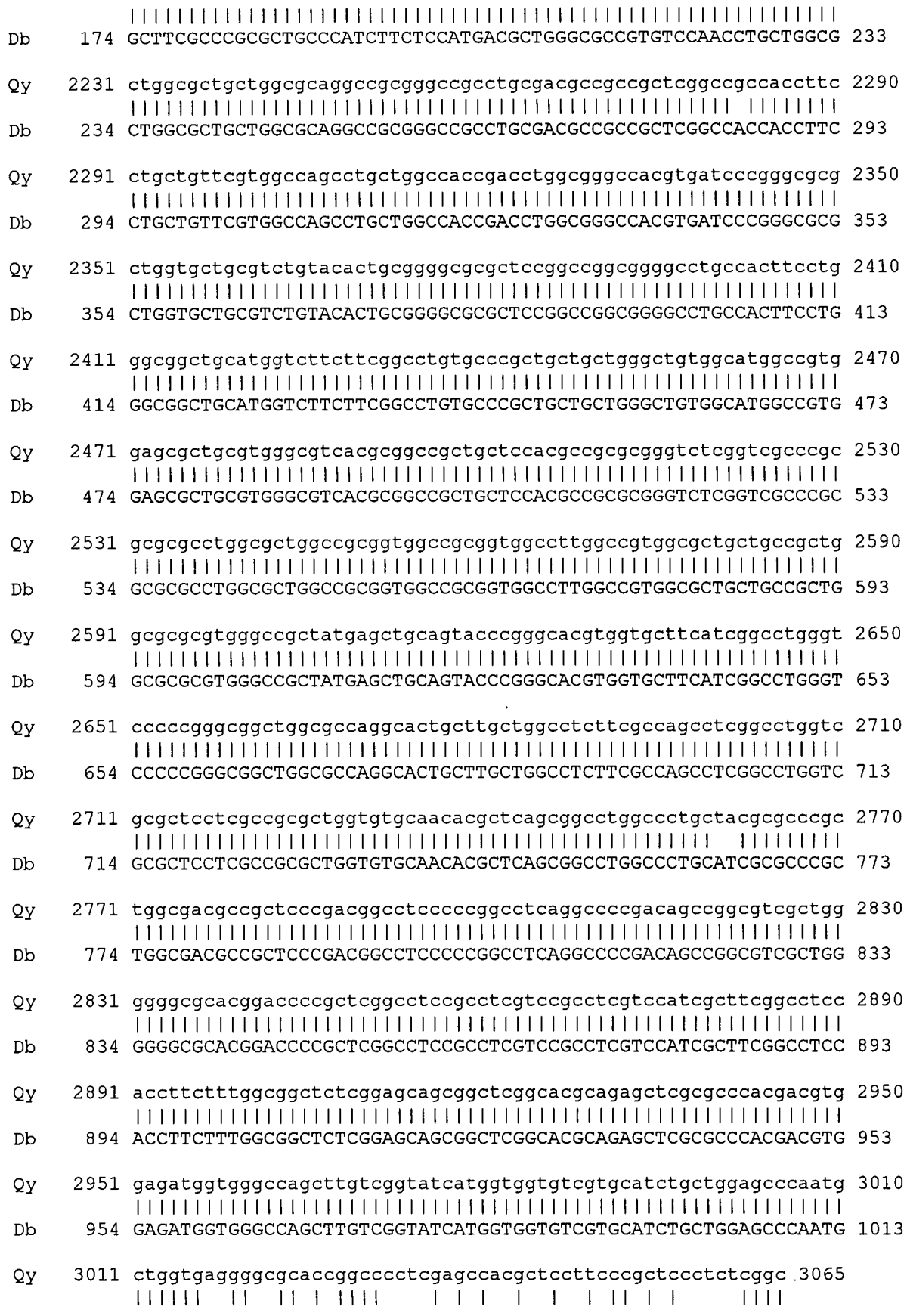

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Db    1014 CTGGTGTTGGTGGCGCTGGCCGTCGGCGGCTGGAGCTCTACCTCCCTGCAGCGGC 1068


RESULT   2
US-09-255-671-3
; Sequence 3, Application US/09255671
; Patent No. 6031079
;  GENERAL INFORMATION:
;    APPLICANT:  Ford-Hutchinson, Anthony
;    APPLICANT:  Funk, Colin
;    APPLICANT:  Grygorczyk, Richard
;    APPLICANT:  Metters, Kathleen
;    TITLE OF INVENTION:  DNA Encoding Prostaglandin Receptor EP1
;    NUMBER OF SEQUENCES:  6
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  JOHN W. WALLEN III
;      STREET:  P.O. BOX 2000, 126 E. LINCOLN AVE.
;      CITY:  RAHWAY
;      STATE:  NEW JERSEY
;      COUNTRY:  USA
;      ZIP:  07065
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/255,671
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/068,729
;      FILING DATE:  26-MAY-1993
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  WALLEN, JOHN W III
;      REGISTRATION NUMBER:  35,403
;      REFERENCE/DOCKET NUMBER:  19012
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (908) 594-3905
;      TELEFAX:  (908) 594-4720
;  INFORMATION FOR SEQ ID NO:  3:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1394 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
US-09-255-671-3


  Query Match             24.7%;  Score 967;  DB 3;  Length 1394;
  Best Local Similarity   97.0%;  Pred. No. 4.3e-171;
  Matches  985;  Conservative    0;  Mismatches   30;  Indels    0;  Gaps    0;

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Db    534 GCGCGCCTGGCGCTGGCCGCGGTGGCCGCGGTGGCCTTGGCCGTGGCGCTGCTGCCGCTG 593

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Qy    3011 ctggtgaggggcgcaccggcccctcgagccacgctccttcccgctccctctcggc 3065
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